



**NEW**

## Redundant Flight Control System

# RiCopterControl RiCC

developed and produced by **RIEGL**

The new flight control system RiCopterControl (RiCC) is RIEGL's response to highest safety and reliability requirements and features a fully redundant hardware design. RiCC supports a wide variety of power and control interfaces, straightforward sensor payload integration and thus enables high flexibility in system configuration.

### Key features

- redundant hardware system design (including flight controller CPU and sensors)<sup>1)</sup>
- sophisticated power management and battery balancing concept
- outstanding build quality for highest reliability, robustness and lifetime
- temperature-calibrated and damped sensors to optimize operation in harsh environments
- resilient to electrical short circuits, CPU or sensor crash failures, cable breaks, etc.
- rigorous in-flight failure detection, handling, and alarming
- highly customizable and optimized for multi-sensorsystem integrations
- powerful telemetry functions (remote control, on-screen-display, operator software, blackbox)
- standard (433, 868, 915 MHz) or customizable frequencies; MAVLINK-based command and control link

1) partly based on open-hardware project Pixhawk and open-source firmware PX4

### Interfaces for sensor payload

#### Power supply:

- 2x 5 V (in total 4 A)
- 3x 7.5 V (in total 6 A)
- 2x 12 V (in total 8 A)
- 1x 24 V (8 A)

#### Control interfaces:

- 1x RS232
- 2x UART (3V3)
- 3x PWM or I/O Pin (3V3)

### Integration examples

- RIEGL VUX and miniVUX series
- RIEGL BDF-1
- ADS-B transponder
- siren, parachute
- strobe-light, landing-light
- data processing hardware
- data transmission hardware

